

EOS-Building

Lausanne, Switzerland

46,3°N, 6,4°E

predominantly cloudy

office building

lightselves

■■■■■

building

The EOS-building is located on a sloped site. The main facade is oriented downhill, towards the South west. The building consists of two office blocks connected by the main entrance on the ground floor level. The front facade is characterized by a horizontal division resulting from recessed continuous strip windows and spandrels clad with natural stone. The aluminum light shelves are visible as a thin line emphasizing the sculptural quality of the facade.

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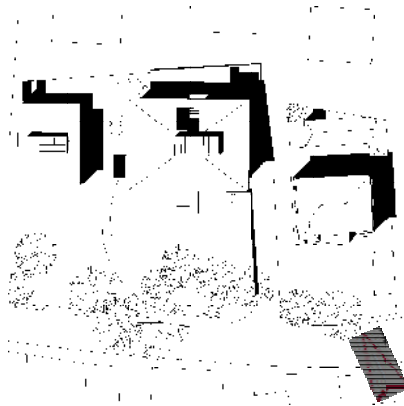
daylight strategy

The division of the building in two separate blocks offers the opportunity for daylight to hit the facade above the entrance hall. Most offices are situated on the South west facade. Split windows and a lightshelf are used to attenuate the daylight near the window and to homogenize the distribution of daylight within the offices. Because of the low ceiling height of 2,58 m, the window above the lightshelf is relatively narrow. Although the sill is low and the windows run continuously from wall to wall, the opening index is only 30% because of the thick framework. The lower window is equipped with blinds that are controlled manually. Clerestories in the partition wall relate the office to the core of the building but do not increase the daylight level significantly.

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selected office

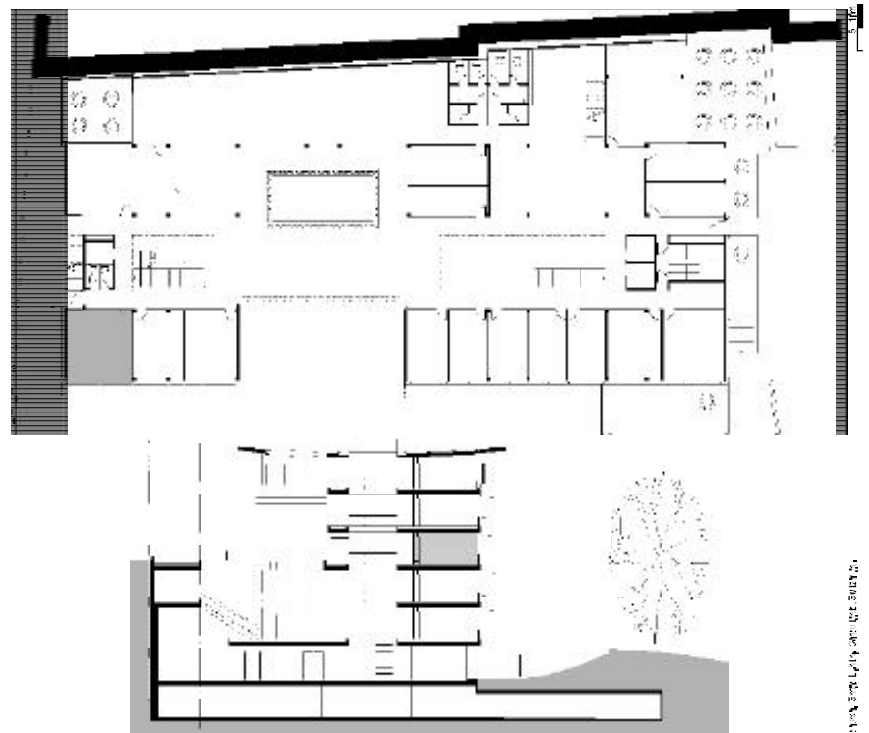
The cellular offices have operable windows and are naturally ventilated. The wiring system is directed through a steel subfloors. The concrete slab functions as the ceiling for the room below. Each office is equipped with one movable standard lamp with three 55 W fluorescent bulbs.



The EOS-building is situated on a sloping site in Lausanne.



Main southwest facade of the EOS Building.



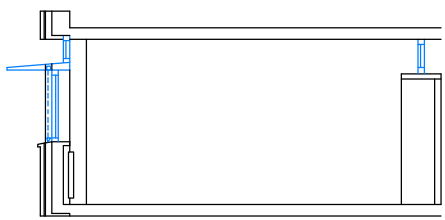
The cross-section shows the integration of the building in the sloped site, as the floorplan shows most offices line up along the main facade.



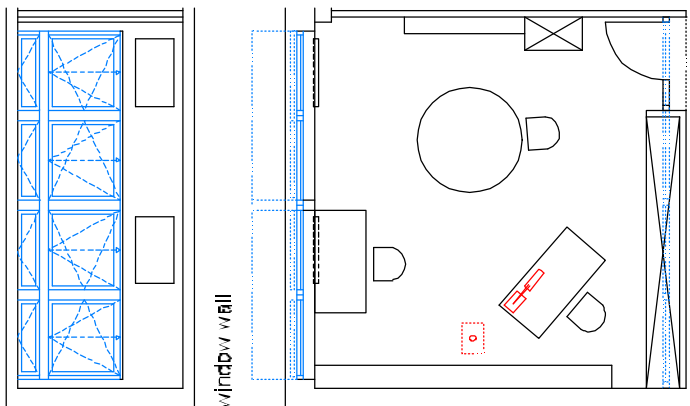
Interior view of the selected office showing bright patches of redirected daylight on the ceiling in the immediate surrounding of the window. Due to the lightshelf and the integration of blinds the transom of the window appears to be quite massive.



As the exterior view of the facades shows, the window strip above the lightshelf is quite narrow, the spandrel dressed with natural stone projects from the facade and hence obstructs the upper window significantly.



cross-section



window wall

plan

building data

size	2400 m ²
number of stories	6
architect	Richter & Dahl Rocha
daylight consultant	Sorane SA
year of completion	1995

of fice room

daylight strategy	bilateral, sidelighting
dimensions (depth/width/height)	5,2 m / 5,7 m / 2,6 m
room area	29,6 m ²
floor	12%
wall	white paint, 79%
ceiling	white paint, 82%
working table	timber, 16%
facade	double glazing
corridor facing windows	single glazing
type of luminaries	movable floor standard lamp
lamp type	fluorescent lamps
installed power density	5,6 W/m ²
control strategy	manual switching

facade		SW-facade	NE-facade
data	orientation	SW	NE
	glazed area	4,4 m ²	1,23 m ²
	opening index	0,30	0,08
function	daylighting	•	•
	view outside	•	•
	ventilation	•	•
	operable	•	•
	shading	•	•
	redirection	•	•
		•	•
systems		light shelf	jaouise
function	sun shading	•	•
	glare protection	•	•
	redirection	•	•
	inside	•	•
location	window pane	•	•
	outside	•	•
	movable	•	•
location	fixed	•	•
		•	•